

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Status of Claims:

No claims are currently being cancelled.

Claims 1, 10 and 11 are currently being amended.

Claims 12-14 are currently being added

This amendment and reply adds and amends claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claims remain under examination in the application, is presented, with an appropriate defined status identifier.

After adding and amending the claims as set forth above, claims 1-14 are now pending in this application.

Request for Consideration of Information Disclosure Statement (IDS):

Applicant respectfully requests that the PTO evidence the consideration of the IDS filed on December 23, 2003, by returning an initialed copy of the PTO form SB/08 submitted with that IDS in the next PTO correspondence to Applicant.

Claim Rejections – Prior Art:

In the Office Action, claims 1-4 and 7-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0144005 to Mae et al. in view of U.S. Patent Publication No. 2002/0143924 to Iga; and claims 5 and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mae et al. and Iga and further in view of U.S. Patent Publication No. 2003/0086122 to Parry. These rejections are traversed with respect to the presently pending claims under rejection, for at least the reasons given below.

As recited in independent claim 1, an image forming apparatus comprises a plurality of processing sections (such as a system processing section, a scan processing section, a print processing section, and an option processing section as recited in dependent claim 2), and operates using data stored in storage devices of the processing sections. The apparatus is capable of receiving data from outside and executing data overwrite. If data overwrite fails during a data overwrite operation, or if power is disrupted during the data overwrite, or if mismatching occurs between the processing sections, there would be such cases that normal operation cannot be started after the apparatus is rebooted or power is turned on again.

The present invention aims to cope with the above cases. As recited in independent claim 1, a confirming section confirms whether the image forming apparatus is operable with a combination of the data stored in the storage devices immediately after the overwrite section overwrites the data or immediately after power to the apparatus is turned on. A second control section executes, when the confirming section confirms that the image forming apparatus is not operable, a control to overwrite the data in the storage devices on the basis of the basic data and overwrite data stored in the storage section, thereby to realize a latest optimal combination of data. For example, version data indicating a combination of data that do not cause any problem is stored in the storage section together with the overwrite data, and is referred to in determining the latest optimal combination (these features are explicitly recited in new claims 12-14).

Turning now to the cited art of record, Mae et al. discloses an apparatus that rewrites firmware with data that has been externally received (e.g., received from outside of the apparatus). The Office Action recognizes that Mae et al. does not clearly disclose the confirming section of the presently claimed invention, and turns to Iga for such a disclosure.

Iga discloses a printer that processes a command, such as a firmware update command received in the form of an electronic mail from an operator. For updating of the firmware, data which updates the firmware is attached as an attached file. Further, a return mail is formed and returned to the operator. In the return mail, "completed (successful)" or "failed" is described as a process result. The Office Action asserts that Iga discloses the claimed confirming section and the claimed second control section of the present invention, and that

the above teaching of Iga would enable the operator to be able to acquire the requested information of the printer without going to the client office. However, Iga does not aim to start normal operation after the apparatus is rebooted or power is turned on again, even if data overwrite fails during the data overwrite operation, if power is disrupted during the data overwrite, or if mismatching occurs between the processing sections. Although the result "completed " or "failed" is obtained in Iga, this is not a process that is performed to prevent the failure in the operation of the printer. Therefore, if the operation is failed, the operator needs to control the printer again by transmitting the firmware update command together with the data which updates the firmware.

In the present invention, if data overwrite fails during the data overwrite operation, or if power is disrupted during the data overwrite, or if mismatching occurs between the processing sections, the basic data and the overwrite data stored in the storage section are selected into the latest optimal combination for the present configuration of the processing sections. Accordingly, the image forming apparatus according to the presently claimed invention is kept operable. Since Mae et al and Iga do not teach or suggest these features of the presently claimed invention as exemplified by independent claims 1, 10 and 11, these claims are patentable over the combination of these two references, whereby Parry (cited against claims 5 and 6) does not rectify these deficiencies of Mae et al. and Iga.

New Claims:

New claims 12-14 have been added to recite additional features of the present invention that are believed to provide a separate basis of patentability for those claims, beyond the reasons given above for their respective base claims.

Conclusion:

Since all of the issues raised in the Office Action have been addressed in this Amendment and Reply, Applicant believes that the present application is now in condition for allowance, and an early indication of allowance is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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